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Camille M.S. Martina^a, Nan L. Stevens^a & Gerben J. Westerhof^a

^a Centre for Psychogerontology, Behavioural Science Institute, Radboud University Nijmegen, Nijmegen, the Netherlands

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Promotion of self-management in friendship

Camille M.S. Martina*, Nan L. Stevens and Gerben J. Westerhof

Centre for Psychogerontology, Behavioural Science Institute, Radboud University Nijmegen, Nijmegen, the Netherlands

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This study examines changes in self management abilities among women in a friendship enrichment programme. The study is based on the theory of self management of well-being which identifies relevant self-management skills as self-efficacy, taking initiative, investment behaviour and attaining variety in resources. An intervention group ($N = 60$) and a control group ($N = 55$) were studied at a baseline, three months and nine months later. Results indicate that the programme is effective in stimulating two of the four self-management abilities. Compared to the control group, participants in the intervention showed greater increases in initiative taking and more investment behaviour in friendship. There was no change in self-efficacy or variety in friendship. We conclude that older adult women are able to improve some self-management abilities in friendship after participating in this programme. Important goals for future studies are to improve the measurement of self-efficacy and relate improvement in self-management to subjective well-being.

Keywords: friendship intervention; self-management abilities; older women

Introduction

Baumeister and Leary (1995) maintain that human beings have a fundamental need to belong, a basic human motivation to form and maintain at least a minimum quantity of lasting positive personal relationships. Fulfilment of this need to belong is related to multiple strong effects on health, adjustment and subjective well-being. An important question is how interventions can support the fulfilment of the need to belong.

In an earlier publication (Stevens, Martina, & Westerhof, 2006) we have described positive effects of participation in a friendship enrichment programme for older women in terms of contributing to the fulfilment of their need to belong. Deprivation in belongingness was evident in high initial levels of loneliness among participants, many of whom were widowed or divorced and lived alone. After six months a majority reported improvements in friendship and development of new friendships, as well as an increase in positive mood and life satisfaction and a decrease in negative mood (Martina & Stevens, 2006). Improvement in friendship in combination with developing new friendships contributed to a significant reduction of loneliness within a year (Stevens et al., 2006). According to Blazer (2002), interventions designed to reduce or prevent loneliness among older adults have been recognized as valuable instruments for improving quality of life of older adults. However, until recently, studies on the effectiveness of these interventions were scarce in gerontological literature (Cattan, White, Bond, & Learmouth, 2005; Findlay, 2003).

In this article we will focus on mechanisms underlying the reported improvements, using the theory on self management of well being (Steverink, Lindenberg, & Slaets, 2005) as a theoretical framework. First, we will elaborate on the importance of self efficacy in social relationships and the theory of self management of well being. Subsequently, we will focus on the application of the self management theory in the domain of social relationships and on interventions focused on friendship.

Steverink et al. (2005) developed the Self Management of Well-being (SMW) theory which suggests that when older adults improve their self-management abilities, they are able to manage their resources as well as their losses in such a way that their overall well-being is maintained or even improved. This article focuses on the possible enhancement of self management skills in social relationships, especially friendship, by means of an intervention for older adult women. By self management in social relationships is meant self-regulatory activities to initiate and maintain desired social relationships.

According to the SMW theory there are six self-management abilities that refer to cognition, active-motivational process and processes of combining and multiplying resources. Two cognitive self management abilities involve *self-efficacy beliefs* and a *positive frame of mind*. The former refers to the belief that one is effective in managing resources and personally competent in achieving well-being. The latter refers to the ability to adopt and maintain a positive perspective regarding the future, rather than to focus on loss. The two active-motivational self management abilities

*Corresponding author. Email: c.martina@psych.ru.nl

involve *taking initiative* (the ability to take action with regard to the realization of one's well-being) and investment behaviour (the ability to invest in resources to achieve stability and maintenance of well being). The two resource-combining self management abilities concern attainment of *multifunctional resources and variety in resources*. The former involves the ability to gain and maintain resources or activities that serve multiple dimensions of well being simultaneously, in a mutually reinforcing way. Variety in resources refers to the ability to achieve and maintain more than one resource or activity to achieve a specific aspect of wellbeing (Schuurmans et al., 2005; Steverink et al., 2005).

The friendship enrichment programme

The Dutch educational programme on friendship enrichment for women aged 55 and older (Stevens & Albrecht, 1995) emphasizes the importance of self management in order to develop and maintain the friendships that one needs or desires. The self-management abilities identified by Steverink et al. (2005) are relevant to this programme, which is designed to improve friendship in order to enhance fulfilment of the need to belong. Self-efficacy is a valuable resource to achieve and maintain desired friendships because it determines the degree to which one dares to set goals in friendship and visualize the steps necessary to achieve them. It also determines one's perseverance in the process of attaining desired goals (Bandura, 1997). The ability to take initiative in friendship is important for both developing new friendships and for accessing existing friendships to seek company and support. Maintenance of friendship requires the willingness and ability to invest time and energy in friendship; this in turn is related to having a positive frame of mind with regard to the future of particular friendships. Developing variety in one's network of friendships, as well as multifunctional friendships are also self-management abilities that are likely to enhance the nature of friendship and contribute to fulfilment of the need to belong. A multifunctional friend is a person who can satisfy several needs and desires, such as the desire for affection and the need for stimulating social activities. Achieving variety in friendship means ensuring that one has more than one friend. Variety makes one less vulnerable for potential loss in the future, and is therefore an important self-management ability in the process of aging (Kremers, Steverink, Albersnagel, & Slaets, 2006).

The friendship enrichment programme for older women is a multifaceted intervention that focuses on several self management abilities with the aim of empowering the participants to develop and maintain the friendships that they desire at an optimum level (Stevens & Albrecht, 1995). The programme focuses on cognitive process by reflecting on personal needs,

desires and expectations in friendship. It addresses the active-motivational processes of self management by stimulating the participants to take initiative in developing new friendships and in improving existing friendships. Finally, the programme encourages the participants to develop variety in their friendships in order to have different friends available to serve different functions (emotional support, companionship, affection). In this sense, the programme emphasizes the advantage of variety rather than multifunctionality in friendship (Stevens, 2001).

The friendship enrichment programme consists of 12 lessons focused on different topics related to friendship such as expectations in friendship, self-esteem as a basis for friendship, making new friends, setting goals and boundaries and solving conflicts in friendship. Each lesson consists of theory, practice in skills that are important in friendship, role-playing of social situations that are difficult for participants and a homework assignment. At a follow-up meeting six months after the programme, participants meet to evaluate their success and redefine their goals relating to friendship and self management in friendship for the future.

The programme focuses on older adult women because in later adulthood women are more likely to be widowed and live alone, two conditions that make them more vulnerable to loneliness (De Jong Gierveld, 1998; Pinquart & Sörensen, 2001). In later adulthood women also experience greater physical and emotional vulnerability due to multiple pathology, more extensive functional limitations, and higher incidence of depression and anxiety, compared to men (Sonnenberg, Beekman, Deeg, & Van Tilburg, 2000). Furthermore, women continue to be interested in friendship (Field, 1995) and clearly benefit from interaction with friends throughout later life (Adams, 1987; Stevens et al., 2006).

The aim of this study is to examine the effects of participation in the friendship programme in terms of self management abilities. The main hypothesis is that participants in the friendship enrichment programme will demonstrate significant increases in self-management abilities in friendship. In other words, there will be evidence for increases in self-efficacy, initiative-taking and investment behaviour in friendship and greater variety in friendship resources as a result of participation in the friendship enrichment programme. The improvement in self-management abilities will be greater among women who participate in the programme than among members of a control group.

Method

Participants

The intervention group consisted of 60 women over age 55 who participated in and completed the friendship enrichment programme offered in four local senior

service agencies in 2000–2003 in the Netherlands. The response for participation in the study was 82%.

They were compared to a control group of 55 women of similar age who were interested in the programme or in improving their friendships, but who did not participate. Some were on a waiting list for the course (10%); others were recruited through an on-line announcement on the study on a website for older persons (90%).

The intervention group and control group were similar on most background variables except for reported health restrictions (Table 1).

The average age of the women in both groups was 63.2, with an age range from 53–86. The proportions of married, widowed and divorced were approximately 30% in both groups. About two thirds (67%) lived alone. The majority of the respondents had completed secondary school (58%), and 30% had completed

college. Most women consider their health to be good or excellent (78.3%). There were no significant differences in income, financial stress or use of medication between the groups. The groups did differ on everyday health limitations: 68% of the participants in the programme reported health restrictions, compared to 48% in the control group ($\chi^2_{(1)} = 5.234$, $p < 0.005$). The women who participated in the friendship programme also scored significantly higher on the loneliness scale ($M = 7.49$, $SD = 3.52$) than those in the control group ($M = 4.96$, $SD = 4.16$; $t_{(113)} = 3.57$, $p < 0.01$) at the baseline. A valid and reliable loneliness scale consisting of 11 items was used to measure loneliness (De Jong Gierveld & Kamphuis, 1985). Scores on the scale range from zero (not lonely) to 11 (extremely lonely); a score between three and eight indicates moderate loneliness, while a score above nine indicates severe loneliness (De Jong

Table 1. Comparison of background characteristics and loneliness at T_0 of the intervention group and control group, (significance of differences according Chi-square test).

| | Intervention group $N = 60$ | Control group $N = 55$ | Overall $N = 115$ | Intervention versus control |
|---------------------------------------|--------------------------------|---------------------------|----------------------|--------------------------------|
| Background characteristics | | | | |
| Age (average years) | M 63.2 % | M 63.1 % | M 63.0 % | Sig. $t = ns$ χ^2 |
| Marital status | | | | |
| Married | 30.0 | 32.1 | 31.3 | ns |
| Never married | 6.7 | 7.1 | 7.0 | |
| Divorced | 30.0 | 33.9 | 32.2 | |
| Widowed | 33.3 | 26.8 | 29.6 | |
| Educational level | | | | |
| Elementary | 11.7 | 5.4 | 8.7 | ns |
| Secondary | 58.4 | 57.2 | 57.5 | |
| Higher education | 30.0 | 37.6 | 33.8 | |
| Subjective evaluation of health | | | | |
| Excellent | 13.3 | 21.4 | 17.4 | ns |
| Good | 65.0 | 55.4 | 60.9 | |
| Average | 20.0 | 21.4 | 20.0 | |
| Poor | 1.7 | 1.8 | 1.7 | |
| Income (in Euros) | | | | |
| Did not tell | 11.7 | 7.1 | 9.6 | ns |
| ≤ 750 | 28.6 | 26.7 | 27.8 | |
| ≥ 750 | 64.3 | 61.7 | 62.6 | |
| Experience financial stress | | | | |
| Never | 66.7 | 76.8 | 71.3 | ns |
| Some times | 26.7 | 16.1 | 21.7 | |
| Regularly | 6.7 | 3.6 | 5.2 | |
| Constantly | – | 3.6 | 1.7 | |
| Use of medication | | | | |
| No medication | 33.3 | 35.7 | 34.8 | ns |
| Medication for physical complaints | 41.7 | 51.8 | 47.0 | |
| Medication for mental health | 10.0 | 1.8 | 6.1 | |
| Medication for physical & mental | 15.0 | 10.7 | 12.2 | |
| Restriction in activity due to health | | | | |
| No restrictions | 31.7 | 51.8 | 41.7 | 4.41* |
| Mild restrictions | 41.7 | 16.1 | 28.7 | 9.03* |
| Major restriction | 26.7 | 32.1 | 29.6 | ns |

Note: * $p < 0.05$; ns = not significant.

Gierveld & Van Tilburg, 1999). Both groups were lonely, since the cut-off point for loneliness, measured with the loneliness scale is a score above 2.

Procedures

To evaluate the effects of the friendship enrichment programme on self-management in friendship, a pre-test-post-test-follow up control group design was used. Assignment to groups did not occur randomly since the programme was already implemented. Both the researchers and the participating agencies considered it not beneficial to assign lonely women who signed up for the programme to a waiting-list control group for nine months or more. This would be contradictory to the programme's goal of empowerment of its participants (Stevens & Van Tilburg, 2000).

All participants have been studied at three points in time: at baseline prior to the friendship programme, or upon recruitment for the control group (T_0), directly finishing the 12 week programme or three months after baseline (T_1), and again six months later (T_2 ; 9 to 10 months after the baseline). The timing of measurements was based on the assumption that developing relational competence and actual change in friendship takes time (Stevens, 2001). Excluding dropouts due to natural causes (e.g. sickness, or death), the non-response rate was 6% at the second round of interviews, and 2% at the third round of interviews. Analyses were done on those respondents for whom data was complete for all three measurements.

The data was collected in face-to-face semi-structured interviews at the respondent's home. After each interview, with an average duration of two hours, the respondents were asked to complete the self-administered questionnaires that included several standardised, valid scales for the dependent variables in this study. The participants received a gift voucher for €12,50 after each interview.

Measures

Interviews

The semi-structured interviews included questions on demographic and other background characteristics such as age, marital status, education level, income, education, subjective health, loneliness, as well as questions on important friendships and motivation for participation in the friendship enrichment programme or in the study for the control group.

Outcomes related to self management

Self-efficacy

The *orientation in friendships scale* was developed for this study and is based on the *General Causality Scale* (Deci & Ryan, 1985). It measures self-efficacy in terms of belief in one's personal competence in developing

and maintaining desired friendships. The scale consists of three subscales referring to autonomy, control and impersonal orientations. Each subscale consists of four statements on friendship which are scored on a four-point Likert-type scale ranging from 1 (not characteristic at all) to 4 (very characteristic) by each person concerning herself. The items were drawn from interviews with former participants in the programme. The autonomy orientation involves a high degree of experienced choice with respect to the initiation and regulation of one's own behaviour. An item on this subscale is 'I can indicate very clearly what I want and don't want in friendship'. The control orientation involves organizing behaviour to conform to controls either in the environment or inside oneself. An example is: 'The fulfilment of social obligations is very important in friendship'. The impersonal orientation involves experiencing one's behaviour as being beyond intentional control. An example of an item is: 'I doubt whether I will be able to develop the friendships that I would like to have'. The assumption is that the autonomy subscale is positively related to self efficacy, while the control and impersonal orientation are negatively associated with self-efficacy. In the current study the Cronbach alpha coefficients for the subscales were 0.54 for the autonomy subscale, 0.58 for control and 0.62 for impersonal orientation.

Positive frame of mind

We did not measure positive frame of mind because it was expected that all participants were interested in improving their friendships.

Taking initiative

Four of the five subscales of the social situations inventory (IOA; Van Dam-Baggen & Kraaimaat, 1990) were used to measure the ability to take initiative in social relationships. The IOA is a self-report questionnaire based on an interactive concept of social anxiety. It has 35 items providing scores for five subscales: 'initiating contact', 'expressing an opinion', 'expressing criticism', 'making a compliment' and 'positive self-esteem'. The self-esteem subscale was excluded since it does not directly involve taking initiative in social situations. Participants were asked how often certain situations happened (e.g. 'Initiating a conversation with a stranger'; 'Asking a friend to help you with something'). The Cronbach alpha coefficient was 0.64 for the subscale 'initiating contact', 0.75 for the subscale 'expressing opinion', 0.76 for the subscale 'expressing criticism' and 0.79 for the subscale 'making a compliment'.

Investment behaviour

The investment behaviour that is encouraged in the friendship enrichment programme involves taking action to develop new friendship and/or improve

existing friendships. To study successful investment behaviour, data was drawn from the Personal Convoy of relationships that was included in the interview (Kahn & Antonucci, 1980). A personal convoy consists of three circles in which a respondent arranges his or her relationships according to their importance and closeness. The participants completed personal convoys during the first and the third interview. During the third interview (T_2) they were also asked to compare the first personal convoy with the one completed during the third interview, and to describe any changes that had taken place, especially regarding friendship. Specific questions concerned whether there were new friends in the convoy at T_2 and whether existing friendship were assigned new positions in terms of importance and closeness. Any positive changes were scored as improvements indicating greater closeness or importance.

Multifunctionality of resources

To examine multifunctional resources, we analysed data collected with the social support questionnaire developed by Van Tilburg (1988). This questionnaire consists of 10 items on the subjective evaluation of social support in a relationship. Two kinds of social support are included, *daily social support* (e.g. I notice that he/she cares for me) and *social support when problems arise* (e.g. I can go to him/her when I need a shoulder to cry on). Each type of social support is measured by five items which are scored on a three point Likert-type scale ranging from 1 (never) to 3 (often). The sum of the two types of social support represents the total experienced social support with a range of 10 (no support) to 30 (maximum support). The Cronbach alpha coefficient of the questionnaire was 0.84 in the current study.

The respondents in both the intervention and the control group filled the questionnaire in for three friends they had chosen from their personal convoy at the baseline (T_0), and for these same three friends at the first post-test (T_1) and the second post-test (T_2). Multifunctional friend support per friend was measured by counting the items on which a friend often provided a particular type of support.

Variety in resources

There are two measures of variety in friendship resources. The first dichotomous measure is whether or not friends are available in more than one circle of the convoy, that is, whether there is variety in the importance and closeness of available friendships. The second dichotomous measure is whether or not more than one friend is included in the inner circle of the convoy indicating variety in the composition of the inner circle of the convoy.

Results

Self-efficacy

Possible change on the three subscales of the *Orientation in Friendship scale* was studied as an indication of change in self-efficacy in management of friendship using a multiple repeated measures MANOVA. Condition was used as the between-subjects factor, and the measures of the concepts of autonomy, control and impersonal orientations were considered to be repeated measures of the within-subjects (time) factor. The analysis showed that the main effect of time was statistically significant only for the concept impersonal orientations, and not for the concepts autonomy and control orientations. Thus there was a change in the impersonal type of control but not in the autonomy and control types of control. There was a significant effect for condition for autonomy and impersonal orientations in friendship, but not for control orientation: the intervention group scored lower on autonomy, and higher on impersonal orientations in friendship. The absence of an interaction effect (Table 2) indicates that the stability in self-efficacy in management of friendship in the intervention and control group was similar over time.

Taking initiative

An analysis of variance using repeated measures was used to test whether there were significant changes in the various subscales of the inventory of social behaviour (Table 2). Improvement was evident on two subscales for participants in the friendships enrichment programme that differed significantly from changes in the control group. Programme participants were more likely to express their opinions and to take initiative in making contact with others at the second post-test, compared to baseline. On other subscales there were no significant effects when the two groups were compared across the three measurement points.

A paired comparison of the first with the second and third measurement moment (T_0-T_1 ; T_0-T_2) in the intervention group showed a significant increase in taking initiative in making contact by the participants at both the first post-test ($t_{(1,59)} = -2.062$, $p = 0.044$) and the second post-test ($t_{(1,59)} = -2.725$, $p = 0.008$). A significant increase in expressing opinions was only found for the participants in the intervention group at the second measurement moment ($t_{(1,59)} = -3.234$, $p = 0.02$). The control group showed only a significant increase of expressing opinion at the first post-test ($t_{(1,54)} = -2.449$, $p = 0.018$). On the other subscales there were no significant changes in the control group.

Investment behaviour

There were improvements in friendship among participants in the friendship enrichment programme at the

Table 2. Multiple measures MANOVA of the differences between the intervention and the control group on the five subscales of social situations inventory (IOA), the three subscales of orientation in friendship scale, and multifunctionality of resources at the time of the pre-test (T_0), the first post-test (T_1) and the second post-test (T_2).

| <i>Self-efficacy/subscale orientation in friendship</i> | Condition | <i>n</i> | T_0 | T_1 | T_2 | Test results ($F_{1,114}$) | | |
|---|--------------|----------|---------------|---------------|---------------|------------------------------|---------|-------------|
| | | | <i>M</i> (SD) | <i>M</i> (SD) | <i>M</i> (SD) | Condition | Time | Interaction |
| Autonomy orientation | Intervention | 60 | 11.52 (2.12) | 10.93 (1.99) | 11.51 (1.97) | 21.99*** | 2.993 | 0.066 |
| | Control | 55 | 12.71 (1.82) | 12.40 (2.17) | 12.81 (2.07) | | | |
| Control orientation | Intervention | 60 | 12.53 (2.27) | 12.27 (2.02) | 12.15 (1.78) | 0.789 | 0.862 | 0.224 |
| | Control | 55 | 11.04 (1.92) | 10.75 (2.04) | 10.85 (1.90) | | | |
| Impersonal orientation | Intervention | 60 | 12.02 (2.28) | 12.30 (1.69) | 11.86 (2.07) | 5.537* | 3.314* | 0.054 |
| | Control | 55 | 10.62 (2.41) | 10.20 (2.36) | 10.22 (2.26) | | | |
| <i>Taking initiative/subscale IOA</i> | | | | | | | | |
| Initiating contact | Intervention | 60 | 14.85 (3.11) | 15.48 (3.03) | 15.66 (2.72) | 1.806 | 1.974 | 3.545* |
| | Control | 55 | 16.16 (2.71) | 15.73 (3.04) | 16.13 (2.92) | | | |
| Expressing an opinion | Intervention | 60 | 16.53 (3.32) | 16.93 (3.08) | 17.47 (2.96) | 9.523** | 5.851** | 3.552* |
| | Control | 55 | 17.85 (3.23) | 19.29 (3.95) | 18.55 (2.80) | | | |
| Expressing criticism | Intervention | 60 | 17.23 (4.16) | 17.37 (3.65) | 17.69 (3.64) | 13.8*** | 4.646* | 0.880 |
| | Control | 55 | 19.25 (4.01) | 19.29 (3.95) | 20.47 (4.04) | | | |
| Making a compliment | Intervention | 60 | 16.97 (2.32) | 16.98 (2.06) | 16.95 (2.02) | 3.954* | 0.193 | 0.111 |
| | Control | 55 | 17.55 (2.06) | 17.67 (2.16) | 17.71 (1.78) | | | |
| <i>Multifunctionality of resources</i> | | | | | | | | |
| Friend 1 | Intervention | 60 | 6.57 (2.49) | 6.58 (3.10) | 6.18 (2.97) | 0.153 | 1.525 | 0.126 |
| | Control | 55 | 6.84 (2.53) | 6.64 (2.99) | 6.40 (3.06) | | | |
| Friend 2 | Intervention | 60 | 6.15 (2.73) | 5.42 (3.29) | 5.77 (3.18) | 0.060 | 2.446 | 1.833 |
| | Control | 55 | 5.84 (2.89) | 5.78 (2.85) | 5.35 (3.22) | | | |
| Friend 3 | Intervention | 60 | 4.96 (3.06) | 3.97 (3.26) | 4.20 (3.41) | 1.149 | 1.968 | 1.547 |
| | Control | 55 | 4.96 (3.05) | 4.93 (3.45) | 4.78 (3.35) | | | |

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 3. Percentage of women reporting variety and investment behaviour in friendship at the time of the pre-test (T_0), and the second post-test (T_2).

| Variables | Condition | <i>n</i> | T_0 | T_2 |
|---|--------------|----------|-------|-------|
| Successful investment behaviour | | | | |
| New friends | Intervention | 60 | | 63% |
| | Control | 55 | | 33% |
| Improvement in friendship | Intervention | 60 | | 62% |
| | Control | 55 | | 46% |
| Variety in resources | | | | |
| Including friends in more than one of the three circles | Intervention | 60 | 41.7% | 51.7% |
| | Control | 55 | 56.4% | 69.1% |
| Including more than one friend in the inner circle | Intervention | 60 | 30.0% | 44.1% |
| | Control | 55 | 30.9% | 38.2% |

second post-test that are considered to be indicators of an increase in investment behaviour (Table 3). Almost two thirds (63%) of the participants in the intervention reported that they had made new friends since participating in the programme. In the control group only 33% of the participants reported having made new friends during the second post-test. This difference in this form of investment behaviour in new friendships between the two groups was significant ($\chi^2_{(1)} = 9.569$, $p < 0.005$). Despite the fact that more friendship programme participants (62%) reported improvements in friendship at the second post-test, compared to 46% of the control, the two groups did

not differ significantly on this measure ($\chi^2_{(1)} = 2.418$, $p = 0.120$).

Multifunctionality of resources

The analysis of variance using repeated measures showed that there was no main effect of time or condition on the support provided by three friends. The interaction effect between time of measurement and condition was also not significant for any of the three friends (Table 2). This means that there was stability in the variety of social support provided

by three friends in both the intervention and control group that was similar over time.

Variety in resources

There was a slight increase in number of women reporting variety in friendship in the 'personal convoy' of in both the intervention and the control group between baseline and the second post-test (Table 3). In the intervention group there was an increase of 10% and in the control group an increase of 12.7% of women reporting that they had friends in more than one circle in the personal convoy, compared to the pre-test. A paired comparison of the pre-test and the second post-test (T_0-T_2) in both groups with the McNemar test showed that this increase was not significant (intervention group, $p=0.26$; control group, $p=0.92$). In both the intervention and the control group there were more women reporting variety in friendship in the inner circle of the personal convoy at the second post-test. In the intervention group there was an increase of 13.3% and in the control group of 7.3% of those with more than one friend in the inner circle. These changes as well as the difference between the intervention and the control group were not significant (intervention group, $p=0.10$; control group, $p=0.39$; $\chi^2_{(1)}=0.407$, $p=0.41$).

Discussion

This study examines whether participation in a friendship enrichment programme for older women contributed to improvement in self management abilities as defined in the theory of Self Management of Well-being (SMW; Steverink et al., 2005). We predicted improvements in four specific self-management abilities that were congruent with the goals of the friendship enrichment programme, which is, in self-efficacy, taking initiative, investment behaviour and developing variety in resources. The prediction was that the programme participants would demonstrate significant improvement on these abilities, compared to a control group of women who did not participate in the programme but who were interested in improving friendship. We did not expect improvement in friendship as a source of multifunctional support, since this is not a goal of the programme.

The results partially supported the hypotheses. Participants in the intervention group showed improvements in two out of the four relevant self-management abilities. They demonstrated greater increases in taking initiative in social situations as well as more frequent expression of opinions, reflecting positive change in the tendency to take initiative. Participants also developed new friendships more often than did control group members indicating that they engaged in investment behaviour in friendship more often.

Despite the positive changes in initiating social contacts and investment behaviour, the participants did not increase the variety of friendships in their personal convoys to a greater degree than did the women in the control group. The absence of change in multifunctional social support received from three friends was consistent with the hypothesis since developing more multifunctional friendships is not a goal of the Friendship Enrichment Programme. This friendship programme emphasizes the importance of developing variety as opposed to multifunctional resources. Many women in the programme have lost a partner, which is typically a multifunctional relationship; they need a variety of friendships in order to compensate for this loss and to protect against major loss of resources in the future (Stevens & Van Tilburg, 2000). There was a slight increase in variety in friendship in the personal convoy in members of both the intervention group and control groups. One possible explanation for the improvement in variety in friendship in both groups is that completing a convoy is an intervention in itself, stimulating all respondents in the study to reflect on the current state of their friendships and to take action when they are dissatisfied or engagement in a particular friendship is less than optimal.

It is rather surprising that the participants in the friendship programme took more initiative and engaged in more investment behaviour in friendship, yet their self-efficacy in friendship, as measured by the friendship orientation scale remained stable as did that of members of the control group. This may be due to the low reliability of the scale. The three causality orientations on which the scale is based may be enduring characteristics of individuals, as Deci and Ryan (1985) suggest, since theoretically they are based on a combination of temperament and early formative experiences in social relationships. It may take more than participation in a programme of 12 weeks duration to influence one's causality orientations. The possibility of studying these control orientations was initially appealing since an explicit goal of the Friendship Enrichment Programme is to support women in developing greater autonomy in the regulation of their social relationships. However, the scale is clearly not reliable in its present form. Two recent studies have used a Self-efficacy Scale by Sherer et al. (1982) to measure (social) self-efficacy or have adapted this scale for this purpose (Cohen-Mansfield & Pappura-Gill, 2007; Fiori, McIlvane, Brown, & Antonucci, 2006). In future research it is preferable to use a scale that has proven to be reliable and valid for measuring social self-efficacy.

Limitations

There were significant differences between the intervention group and control group regarding loneliness at baseline, though both groups were lonely.

Differences in investment behaviour in friendship may be due to the greater loneliness of women in the intervention group that provided a stronger motivation to invest in development of friendship. Perhaps the lower loneliness in the control group was more tolerable. There are also significant differences on the orientation in friendship scales used to measure self-efficacy and one measure of variety in friendship; however on these measures no significant change was found in either group.

Kremers et al. (2006) also did a study on a group intervention to improve self management ability and well-being of older women. Using a self-developed Self-Management Abilities Scale (SMAS-30) these authors found a significant effect for taking initiative, as well as on positive frame of mind and multifunctionality. They found no effect on self-efficacy, variety or investment behaviour, as measured by their scale. The fact that some similar changes in our study were found using different instruments suggests that some self-management abilities (e.g. taking initiative) are easier to influence or change than others (e.g. self-efficacy, variety in resources). However, more research is needed on interventions designed to improve self-management abilities to confirm this. Both our study and that of Kremers et al. indicate that the Self-Management of Well-being theory is useful as a theoretical framework for developing interventions to promote well-being in later life. It is worth consideration to adapt the friendship enrichment programme with this theory in mind. For example, perhaps the authors need to reconsider their position on promotion of multifunctional friendship, which may be useful along with promoting variety in friendship as a self-management strategy.

In conclusion, this study demonstrates that older adult women who have participated in an intervention are successful in improving some but not all of the relevant self-management abilities in friendship. The friendship enrichment programme is primarily effective in stimulating initiative-taking and assertiveness in social situations, as well as investment behaviour in friendship. Further studies will hopefully contribute to increased understanding of self-management abilities and self-management behavioural outcomes related to friendship and other relationships, and their association with subjective well-being.

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